# A NEW SPECIES OF *LIMNORIA* (Crustacea:Isopoda) From Southern California

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Since a year or more must elapse before the publication of the writer's monograph on the species of *Limnoria* of the world, including a full treatment of their synonymy and distribution, it is felt desirable at this time to describe a new species of wood-boring *Limnoria* which occurs in southern California in order that current ecological and parasitological studies by my colleagues having this species as their basis may not be retarded unduly. Reference will, therefore, be made only to the species as it is present locally, although it is known to attain world-wide distribution and to have considerable economic importance because of its ability to bore into creosoted wood.

## LIMNORIA TRIPUNCTATA new species

#### Plate 30

Synonyms, Limnoria lignorum (Rathke), Mohr & LeVeque, 1948, p. 26 (Newport reference).—Richardson, 1899, pp. 821-822 (H. Hemphill's specimens);—1905, p. 269 (San Diego reference).

Diagnosis. Scale of first antenna not conspicuous. Flagellum of second antenna with five articles. Epipod of maxilliped triangulate, two and one-half times as long as wide, and just reaching the articulation of the palp with endopod. Mandibular palp with three articles. Mandible with "rasp" and "file" incisive processes. Fifth somite of pleon medially with two posteriorly located elevated swellings and a single anteriorly located swelling on dorsal surface; central part depressed. Telson medially with one anteriorly located tubercle followed by a pair of tubercles on dorsal surface; paired tubercles each followed by a longitudinal carina. Posterior margin of telson tuberculate; lateral crests of telson tuberculate. Lacinioid seta of right mandible abruptly curved distally, apex spinulate.

Measurements. Holotype male length, 2.0 mm., width of telson at widest point 0.6 mm. Allotype length 2.4 mm., width of telson 0.6 mm.

Type locality. A type series consisting of 44 specimens was collected by Mr. and Mrs. R. J. Menzies on December 23, 1948 from a redwood ladder located on the edge of Mission Bay at the

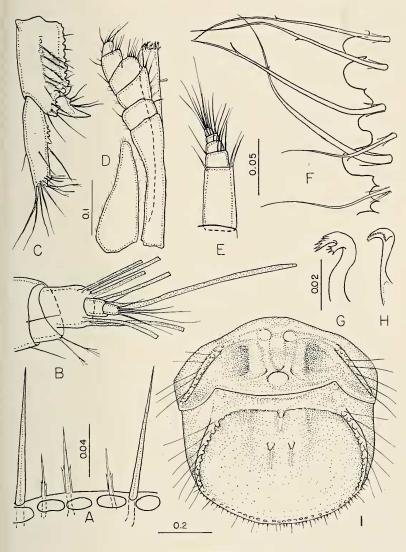


PLATE 30

### Limnoria tripunctata, new species

#### Male paratype

a, posterior edge of telson. b, distal articles of first antenna. c, uropod. d, maxilliped. e, flagellum of second antenna. f, lateral crest of telson. g-h, lacinioid seta of right mandible. i, dorsal view of fifth somite of pleon and of telson. Figures with similar magnifications as indicated by mm. scale: a; b, e, f; c, d; g, h; i.

foot of Fanuel Street, Pacific Beach, San Diego Co., California. A second series consisting of over 100 specimens was received as a loan from Dr. Fenner A. Chace Jr., Curator of Marine Invertebrates, United States National Museum. These specimens had been collected by Dr. H. Hemphill from San Diego, California and had been identified by various investigators as L. californica Hewston, a nomen nudum, and L. lignorum (Rathke) (Richardson, 1905, p. 269). I have designated Hemphill's specimens as additional paratypes of the species.

Location of types. Type specimens have been deposited in the collections of the following institutions: United States National Museum, Washington 25, D. C., holotype, allotype, and 25 paratypes plus an excess of 100 paratypes from the Hemphill collection (Cat. No. 2286 USNM); Allan Hancock Foundation, University of Southern California, Los Angeles 7, California, 2 male, 2 female paratypes; British Museum (Natural History), London, 2 male, 2 female paratypes; Rijksmuseum van Natuurlijke Historie, Leiden, Holland, 2 male, 2 female paratypes.

Specimens examined. In addition to the types, specimens were examined from the following localities: Newport Bay, Orange Co., upper part of bay, February 14, 1950, R. J. Menzies, 100 specimens (in creosoted wood); at bridge, U. S. Highway 101, February 14, 1950, R. J. Menzies, 100 specimens; at overpass, U. S. Highway 101, April 17, 1947, J. L. Mohr and A. LeVéque, 50 specimens. Catalina Island, July 15, 1950, Allan Hancock Foundation, over 100 specimens (from creosoted piling). La Jolla, San Diego Co., August 16, 1949, R. J. Menzies, 25 specimens (with L. quadripunctata Holthuis).

Remarks. This species differs from L. lignorum (Rathke) and L. quadripunctata Holthuis in having three tubercles on the dorsal surface of the telson. In L. lignorum no tubercles are present, whereas, in L. quadripunctata there are four (Holthuis, 1949, pp. 167-172).

#### LITERATURE CITED

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<sup>1905.</sup> A monograph on the isopods of North America. Bull. U. S. Nat. Mus., 54, pp. 1-727.